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28. The device of claim 22 wherein said substrate is a glass substrate.

29. The device of claim 23 wherein said substrate is a glass substrate.

30. The device of claim 24 wherein said substrate is a glass substrate.--

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REMARKS

The Office Action of August 4, 1999 was received and carefully reviewed. Reconsideration and withdrawal of the currently pending rejections are requested for the reasons advanced in detail below.

Filed concurrently herewith is a *Request for a Two Month Extension of Time* which extends the shortened statutory period of response to January 4, 2000. Accordingly, Applicants respectfully submit that this response is being timely filed.

Claims 1-18 were pending prior to the instant amendment. By this amendment, claims 1, 4, 5, 10, 13 and 14 are canceled herein, claims 2, 3 and 6 are amended, and new claims 19-30 are added to recite additional features of the present invention to which Applicants are entitled. Consequently, claims 1-3, 6-9, 11, 12, and 15-30 are currently pending in the instant application.

Addressing the Office Action, claims 2, 4, 6, 8, 11, 13, 15 and 17 are rejected under 35 U.S.C. §112, first paragraph, in which it is asserted that the specification never discloses an insulating film comprising aluminum, nitrogen and oxygen provided on the rear surface of the substrate. However, the specification discloses on page 5, lines 27 to 32 that a trace amount of boron, silicon, carbon, oxygen, etc., may be incorporated to optimally control the strain. That is, by providing under a rear surface of the substrate an aluminum nitride insulating film

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1102 (shown in Fig. 12A) containing therein at least one of boron, silicon, carbon, and oxygen, the strain can be controlled. For this reason, independent claims 2, 6, 8 should be considered supported by the specification and drawings.

Similarly, addressing new independent claims 19-21 and 24, an aluminum nitride insulating film is provided over a front surface of the substrate as shown in Fig 12A, and a trace amount of boron, silicon, carbon, and oxygen may be incorporated in the aluminum nitride insulating film to optimally control the strain, as described in the specification on page 5, lines 27 to 32. For this reason, these independent claims should likewise be supported by the specification and drawings.

Claims 1-4 and 10-13 are rejected under 35 U.S.C. §103(a) over Troxell et al., in view of Ikeda. This rejection is traversed for the reasons advanced below.

The reference to Troxell appears to disclose silicon nitride layers 12 and 14. However, as noted in the Office Action on page 3, the reference to Troxell et al. fails to teach or suggest an aluminum nitride layer. The reference to Ikeda is relied upon for its disclosure of layer 12, which may be made of AlN.

The reference to Ikeda, however, does not teach or suggest an aluminum nitride insulating film containing therein at least one of boron, silicon, carbon, and oxygen as provided by the present invention. As a result, the combination of Troxell et al. with Ikeda fails to teach each of the recited features of the currently pending claims, and, thus, does not render the present invention obvious under Section 103.

Claims 5-9 and 14-18 are rejected under 35 U.S.C. §103(a) over Mano et al., in view of Ikeda. This rejection is also traversed.

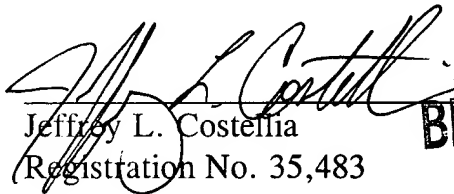
The reference to Mano does not suggest aluminum nitride insulating film containing therein at least one of boron, silicon, carbon, and oxygen. On the

contrary, the present invention as claimed in independent claims 2, 3, 6, and 19-24, in accordance with the amendments herein, recites an aluminum nitride insulating film containing therein at least one of boron, silicon, carbon, and oxygen provided under the rear surface or over the front surface of the substrate.

For the reasons above, the present invention as claimed in independent claims 2, 3, 6, and 19-24 is distinguishable over the cited references.

In view of the foregoing, it is respectfully requested that the rejections of record be reconsidered and withdrawn by the Examiner, that claims 1-3, 6-9, 11, 12, and 15-18 be allowed, that new claims 19-30 be allowed and that the application be passed to issue. If a conference would expedite prosecution of the instant application, the Examiner is hereby invited to telephone the undersigned to arrange such a conference.

Respectfully submitted,


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